

CLAIMS

1. A method of transmitting one or more data streams to a mobile terminal having multiple network connections, the method comprising the steps of;

5 (i) sending the one or more data streams from a correspondent host to a home agent located in the home network of the mobile terminal, the mobile terminal sending a request for the data stream to be transmitted by the correspondent host and the mobile terminal communicating with the home agent to transmit the network location of the mobile terminal to the home agent; and

10 (ii) forwarding the one or more data streams to the mobile terminal, characterised in that the mobile terminal communicates network connectivity data to the home agent and that the forwarding of the one or more data streams is dependent upon the network connectivity data received by the home agent.

15 2. A method of transmitting one or more data streams to a mobile terminal as claimed in claim 1, wherein in response to a change in the network connectivity data received by the home agent at least one of the data streams is forwarded by the home agent to a network cache, said at least one data stream(s) being stored in the network cache until the home agent forwards said at least one data
20 stream(s) to the mobile terminal.

3. A method of transmitting one or more data streams to a mobile terminal as claimed in claim 1 or claim 2, wherein the request sent by the mobile terminal to the correspondent host is sent via the home agent.

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4. A method of transmitting one or more data streams to a mobile terminal as claimed in any of claims 1 to 3, wherein all communication from the home agent to the mobile terminal is routed via a foreign agent, the foreign agent being located in a subnetwork to which the mobile terminal is connected.

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5. A method of transmitting one or more data streams to a mobile terminal as claimed in any of claims 1 to 4, wherein all communication from the mobile terminal to the home agent is routed via a foreign agent, the foreign agent being located in a subnetwork to which the mobile terminal is connected.

6. A method of transmitting one or more data streams to a mobile terminal as claimed in any of claims 1 to 5, wherein in response to a change in the network connectivity data received by the home agent the information content of at least one of the data streams is reduced before being forwarded to the mobile terminal.
7. A method of transmitting one or more data streams to a mobile terminal as claimed in claim 6, wherein the reduction of information content of the at least one of the data stream(s) comprises the conversion from a first data format to a second data format having a lower resolution than the first data format.
8. Computer code means for the performance of the method of any of the preceding claims.
9. A mobile communications terminal comprising
an interface to a plurality of networks;
means for transmitting and receiving data using one or more of the network interfaces; and
control means operative to send messages concerning the availability of communications paths to the mobile terminal via at least one of said plurality of network interfaces.
10. A communications network comprising;
a plurality of mobile communications subnetworks, some of said mobile communications subnetworks having overlapping geographical coverage; and
control means operative such that the mobile terminals can each be in simultaneous communication with more than one of the plurality of mobile communications subnetworks;
characterised in that the control means receives network connectivity data from each mobile terminal and routes data streams to each mobile terminal on the basis of the received network connectivity data from that terminal.

11. A Mobile IP extension comprising an Extension field and a Length field and characterised in that the Mobile IP extension further comprises a Network Type Field and a Care-of-Address field.
- 5 12. A Mobile IP registration packet, characterised in that the Mobile IP registration packet comprises one or more Mobile IP extension(s) according to claim 11.
13. A signal comprising a Mobile IP registration packet according to claim 12.
- 10 14. A communications system for effecting data transfer from a first computer, attached to a communications network, to a mobile communications terminal which has an allocated home address in the communications network and a home agent to manage communication between data sources in the
- 15 communications network and the mobile terminal when the terminal is not at its home address, wherein;
- the mobile communication terminal is configured for simultaneous communication via a plurality of types of wireless communications channels;
- characterised in that the mobile terminal sends to its home agent
- 20 information about the current availability of the different communications channels, the home agent selecting the appropriate communications channel in accordance with the type or characteristics of data to be communicated to the mobile terminal.